IN THE CLAIMS:

Please amend claims 1-14; and

Please add claim 15 as follows.

1. (Currently Amended) ~~A~~ An apparatus, ~~router device for routing data packets in a packet data network, said router device~~ comprising:

at least two separate dedicated link layers having predetermined dedicated link capacities and sharing an available capacity of at least one of a real link layer and a physical layer; and

at least two virtual ~~router~~routers ~~means~~ to which said separate dedicated link layers are ~~allocated~~configured to ~~for~~at least one of ~~transmitting~~ transmit data packets to and ~~receiving~~ receive data packets from said packet data network.

2. (Currently Amended) The ~~router device~~apparatus according to claim 1, wherein said dedicated link layers impose said dedicated link capacities.

3. (Currently Amended) The ~~router device~~apparatus according to claim 1, wherein respective ~~interface~~interfaces ~~means~~ of said ~~said~~ virtual ~~router means~~ routers arbitrarily limit respective said dedicated link capacities.

4. (Currently Amended) The ~~router device~~apparatus according to claim 1, wherein each of said virtual ~~router~~routers ~~means~~ has allocated thereto a separate dedicated address space.

5. (Currently Amended) The ~~router device~~apparatus according to claim 1, further comprising at least one of a base station device and a stand-alone router.

6. (Currently Amended) The ~~router device~~apparatus according to claim 5, wherein said virtual ~~router~~routers ~~means~~ comprise a first virtual ~~router~~router ~~means~~ and a second virtual router ~~means~~, each of which ~~are~~ is configured to be used by different operators.

7. (Currently Amended) A ~~shared network~~ system ~~comprising a plurality of router devices for routing data packets in a packet data network, each router device in said plurality of router devices comprising:~~

~~at least two separate dedicated link layers having predetermined dedicated link capacities and sharing an available capacity of at least one of a real link layer and a physical layer; and~~

~~at least two virtual router means to which said separate dedicated link layers are allocated for at least one of transmitting data packets to and receiving data packets from said packet data network, wherein said shared network system comprises~~comprising:

a plurality of routers;

a first set of routers ~~devices~~ among ~~said~~ a plurality of ~~router~~routers ~~devices~~, wherein said first set of ~~router~~routers ~~devices~~ includes a first set of virtual ~~router~~routers ~~means~~ that are connected via a first set of dedicated link layers to form at least a first virtual network, and

a second set of ~~router~~routers ~~devices~~ among said plurality of ~~router~~routers ~~devices~~, wherein said second set of ~~router~~routers ~~devices~~ includes a second set of virtual router means that are connected via a second set of dedicated link layers to form at least a separate second virtual network.

8. (Currently Amended) The ~~shared network~~ system according to claim 7, wherein said first set of virtual ~~router~~routers ~~means~~ and said second set of virtual ~~router~~routers ~~means~~ are configured to be used by different operators.

9. (Currently Amended) A method ~~of sharing network resources in a packet data network, said method~~ comprising ~~the steps of~~:

separating a plurality of link layers into at least a first separated link layer and a second separated link layer;

allocating predetermined portions of an available link layer capacity to said first separated link layer and said second separated link layer; and

using said first separated link layers for data transmission in a first virtual network, and said second separated link layer for data transmission in a second virtual network.

10. (Currently Amended) The method according to claim 9, further comprising ~~the step of~~:

setting capacities of said first separated link layer and said second separated link layer in at least one of a predetermined manner and an arbitrary manner, depending on which of said first separated link layer and said second separated link layer is used.

11. (Currently Amended) ~~A router device~~An apparatus, ~~for routing data packets in a packet data network, said router device~~ comprising:

at least two separate dedicated link ~~layers~~layer means having predetermined dedicated link capacities, and for sharing an available capacity of at least one of a real link layer and a physical layer; and

at least two virtual routers means to which said separate dedicated link layers are allocated, for performing at least one of transmitting data packets to and receiving data packets from said packet data network.

12. (Currently Amended) ~~A~~An apparatus, ~~packet data network,~~ comprising:

separation means for separating a plurality of link layers into at least a first separated link layer and a second separated link layer;

allocation means for allocating predetermined portions of an available link layer capacity to said first separated link layer and said second separated link layer, wherein said allocation means are operably connected to said separation means; and

transmission means for using said first separated link layers for data transmission in a first virtual network, and said second separated link layer for data transmission in a second virtual network, wherein said transmission means are operably connected to said separation means.

13. (Currently Amended) ~~A~~An ~~packet data network~~apparatus, comprising:

a first processor configured to separate a plurality of link layers into at least a first separated link layer and a second separated link layer;

a second processor configured to allocate predetermined portions of an available link layer capacity to said first separated link layer and said second separated link layer, wherein said second processor is operably connected to said first processor; and

a transmitter configured to use said first separated link layers for data transmission in a first virtual network, and said second separated link layer for data transmission in a second virtual network, wherein said transmitter is operably connected to said first processor.

14. (Currently Amended) A ~~shared network~~ system ~~comprising a plurality of router devices for routing data packets in a packet data network, each router device in said plurality of router devices~~ comprising:

a plurality of router devices, wherein each router device of the plurality of router devices comprises;

at least two separate dedicated link layers having predetermined dedicated link capacities and sharing an available capacity of at least one of a real link layer and a physical layer; and

at least two virtual routers to which said separate dedicated link layers are allocated for at least one of transmitting data packets to and receiving data packets from said packet data network, and

wherein said ~~shared network~~ system comprises:

a first set of router devices among said plurality of router devices, wherein said first set of router devices includes a first set of virtual routers that are connected via a first set of dedicated link layers to form at least a first virtual network, and

a second set of router device among said plurality of router devices, wherein said second set of router devices includes a second set of virtual routers that are connected via a second set of dedicated link layers to form at least a separate second virtual network.

15. (New) The system according to claim 14, wherein said first set of virtual routers and said second set of virtual routers are configured to be used by different operators.